

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|-------|--|-----------------|------------------|---------|------------------|
| L1 | 17913 | (o\$1ring gasket seal\$3).clm. and (center central middle).clm. and (ball spher\$4 round glob\$4 circular).clm. | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:09 |
| L2 | 10717 | (o\$1ring gasket seal\$3).clm. and (center central middle).clm. and (ball spher\$4 round glob\$4 circular).clm. and (connect\$4).clm. | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:10 |
| L3 | 543 | (o\$1ring gasket seal\$3).clm. with (center central middle).clm. with (ball spher\$4 round glob\$4 circular).clm. with (connect\$4).clm. | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:10 |
| L4 | 5 | (o\$1ring gasket seal\$3).clm. with (center central middle).clm. with (ball spher\$4 round glob\$4 circular).clm. with (connect\$4).clm. with (substrate wafer workpiece semiconductor).clm. with (hold\$3 support\$3).clm. | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:12 |
| L5 | 10 | tzeng-huan-liang.in. hsieh-jeng-horng.in. chang-jung-hsiang.in. | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:12 |
| L6 | 7 | ((o\$1ring gasket seal\$3).clm. with (center central middle).clm. with (ball spher\$4 round glob\$4 circular).clm. with (connect\$4).clm.) and ((substrate wafer workpiece semiconductor).clm. with (hold\$3 support\$3).clm.)) | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:14 |
| L7 | 7 | ((o\$1ring gasket seal\$3).clm. with (center central\$4 middle).clm. with (ball spher\$4 round glob\$4 circular).clm. with (connect\$4).clm.) and ((substrate wafer workpiece semiconductor).clm. with (hold\$3 support\$3).clm.)) | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:41 |
| L8 | 185 | 118/503.ccls. and (o\$1ring gasket seal\$3) | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:41 |
| L9 | 54 | 118/503.ccls. and (o\$1ring gasket seal\$3) same ((support\$3 hold\$3) with (wafer semiconductor workpiece substrate)) | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:42 |
| S7 | 3 | ("6214119") or ("4923584") or ("5522975").PN. | US-PGPUB; USPAT | OR | OFF | 2006/04/13 12:14 |
| S8 | 441 | (o\$1ring) with (support\$3 hold\$3) with (wafer substrate semiconductor workpiece) | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:36 |
| S9 | 1 | (o\$1ring) with (support\$3 hold\$3) with (wafer substrate semiconductor workpiece) with (spher\$4) | US-PGPUB; USPAT | OR | ON | 2006/04/13 12:14 |
| S10 | 0 | ("2005/0155709").URPN. | USPAT | OR | ON | 2006/04/12 21:02 |
| S11 | 2 | (o\$1ring) with (support\$3 hold\$3) with (wafer substrate semiconductor workpiece) with ball | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:04 |
| S12 | 40 | (o\$1ring) with (support\$3 hold\$3) with (wafer substrate semiconductor workpiece) with (connect\$4) | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:16 |
| S13 | 277 | (o\$1ring).ti. | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:25 |
| S14 | 1045 | 277/910.ccls. | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:25 |
| S15 | 3 | 277/910.ccls. and (ball spher\$4).ti. | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:08 |
| S16 | 103 | 277/910.ccls. and (ball spher\$4) | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:09 |
| S17 | 38 | 277/910.ccls. and ((ball spher\$4) with (o\$1ring seal\$3)) | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:26 |
| S18 | 0 | 277/543.ccls. and (ball spher\$4).ti. | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:28 |
| S19 | 248 | 277/543.ccls. | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:28 |
| S20 | 360 | (o\$1ring) with (support\$3 hold\$3) with (spher\$6 ball) | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:37 |

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|-----|--------|---|----------------------|----|-----|------------------|
| S21 | 4 | S20 and (118/715-733.ccls. 156/345\$.ccls.) | US-PGPUB; USPAT | OR | ON | 2006/04/12 21:36 |
| S22 | 81 | (o\$1ring) with (support\$3 hold\$3) with (spher\$6 ball) | EPO; JPO; DERWENT | OR | ON | 2006/04/12 21:38 |
| S23 | 3 | S22 and (wafer workpiece semiconductor substrate) | EPO; JPO; DERWENT | OR | ON | 2006/04/12 21:38 |
| S24 | 9 | (o\$1ring) with (support\$3 hold\$3) with (spher\$6 ball) with (central\$4 center\$4 middle) | EPO; JPO; DERWENT | OR | ON | 2006/04/12 21:39 |
| S25 | 34 | (o\$1ring) same (support\$3 hold\$3) same (wafer substrate semiconductor workpiece) same (spher\$6 ball) | US-PGPUB; USPAT | OR | ON | 2006/04/13 12:16 |
| S26 | 3 | (o\$1ring) same (support\$3 hold\$3) same (wafer substrate semiconductor workpiece) same (spher\$6 ball) | EPO; JPO; DERWENT | OR | ON | 2006/04/13 12:15 |
| S27 | 1795 | ((156/345.51) or (118/728)).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/04/13 18:16 |
| S28 | 2375 | ((156/345.51) or (118/728) or (118/729)).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/04/13 14:34 |
| S29 | 330 | S28 and o\$1ring | US-PGPUB; USPAT | OR | ON | 2006/04/13 17:49 |
| S30 | 68 | S28 and (o\$1ring with support\$4) | US-PGPUB; USPAT | OR | ON | 2006/04/13 14:52 |
| S31 | 28 | S28 and (o\$1ring with support\$4 with (wafer substrate semiconductor workpiece)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 15:46 |
| S32 | 28 | (156/345\$.ccls. 118/715/733.ccls.) and (o\$1ring with support\$4 with (wafer substrate semiconductor workpiece)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 14:53 |
| S33 | 55 | (156/345\$.ccls. 118/715-733.ccls.) and (o\$1ring with support\$4 with (wafer substrate semiconductor workpiece)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 14:53 |
| S34 | 6 | 118/500.ccls. and (o\$1ring with support\$4 with (wafer substrate semiconductor workpiece)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 15:47 |
| S35 | 0 | 118/500.ccls. and (o\$1ring with support\$4 with (radial\$4)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 15:47 |
| S36 | 4 | (o\$1ring with support\$4 with (radial\$4) with (wafer substrate semiconductor workpiece)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 15:49 |
| S37 | 6391 | (o\$1ring with (radial\$4)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 15:52 |
| S38 | 66 | (o\$1ring with (strut)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 15:49 |
| S39 | 124 | (o\$1ring with (radial\$4) with (ball spher\$7)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 15:57 |
| S40 | 14 | (o\$1ring with (radial\$4) with (ball spher\$7)) | EPO; JPO; DERWENT | OR | ON | 2006/04/13 15:53 |
| S42 | 104 | 277/910.ccls. and (ball spher\$7) | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:27 |
| S43 | 442 | 277/910.ccls. and (radial\$4 diamet\$6) | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:27 |
| S44 | 443 | 277/910.ccls. and (radial\$4 diamet\$7) | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:27 |
| S45 | 287 | 277/910.ccls. and ((radial\$4 diamet\$7) with (across extend\$4 connect\$4)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:29 |
| S46 | 185390 | ((radial\$4 diamet\$7) with (across extend\$4 connect\$4)) | EPO; JPO; DERWENT | OR | ON | 2006/04/13 16:28 |
| S47 | 978 | o\$1ring and ((radial\$4 diamet\$7) with (across extend\$4 connect\$4)) | EPO; JPO; DERWENT | OR | ON | 2006/04/13 16:28 |
| S48 | 3 | ("4811703").URPN. | USPAT | OR | ON | 2006/04/13 16:56 |
| S49 | 289 | o\$1ring same "connecting portion" | USPAT | OR | ON | 2006/04/13 16:57 |

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| S50 | 17 | o\$1ring same "connecting portion" | EPO; JPO; DERWENT | OR | ON | 2006/04/13 16:57 |
| S51 | 7 | o\$1ring with "connecting portion" | EPO; JPO; DERWENT | OR | ON | 2006/04/13 16:57 |
| S52 | 207 | o\$1ring with "connecting portion" | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:58 |
| S53 | 106733 | o\$1ring with "connecting portion" with (diameter\$7 radial\$7) | US-PGPUB; USPAT | OR | ON | 2006/04/13 16:58 |
| S54 | 22 | o\$1ring with "connecting portion" with (diameter\$7 radial\$7) | US-PGPUB; USPAT | OR | ON | 2006/04/13 17:05 |
| S55 | 278 | o\$1ring.ti. | US-PGPUB; USPAT | OR | ON | 2006/04/13 17:12 |
| S56 | 178 | (277/640).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/04/13 17:23 |
| S57 | 680 | (277/637).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/04/13 17:23 |
| S58 | 0 | ("32and(ball spher\$7)").PN. | US-PGPUB; USPAT | OR | OFF | 2006/04/13 17:23 |
| S59 | 70 | S57 and (ball spher\$7) | US-PGPUB; USPAT | OR | ON | 2006/04/13 17:28 |
| S60 | 596 | S57 not (S56 S59) | US-PGPUB; USPAT | OR | ON | 2006/04/13 17:36 |
| S61 | 23 | (paddle robot arm hand) with (transfer\$4 transport\$4) with (wafer substrate semiconductor workpiece) with o\$1ring | US-PGPUB; USPAT | OR | ON | 2006/04/13 17:41 |
| S62 | 28 | (paddle robot arm hand transfer\$4 transport\$4) with (wafer substrate semiconductor workpiece) with o\$1ring | EPO; JPO; DERWENT | OR | ON | 2006/04/13 17:46 |
| S63 | 0 | tzeng-huan-liang.in. hsieh-jeng-horng.in. chang-jung-hsiang.in. | EPO; JPO; DERWENT | OR | ON | 2006/04/13 17:47 |
| S64 | 10 | tzeng-huan-liang.in. hsieh-jeng-horng.in. chang-jung-hsiang.in. | US-PGPUB; USPAT | OR | ON | 2006/11/20 15:11 |
| S65 | 9 | ("4213698" "4473455" "4646418" "4846452" "5033538" "5180000" "5324012" "5330607" "5376180").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2006/04/13 17:48 |
| S66 | 32 | S28 and ((center\$3 central\$3 middle) with (ball spher\$7)) | US-PGPUB; USPAT | OR | ON | 2006/04/13 17:49 |
| S67 | 4 | ("5671910" "5863338" "5899445" "5937993").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2006/04/13 18:01 |
| S68 | 80 | o\$1ring with (strut) | US-PGPUB; USPAT; USOCR | OR | ON | 2006/04/13 18:01 |
| S69 | 273 | (o\$1ring gasket) with (strut) | US-PGPUB; USPAT; USOCR | OR | ON | 2006/04/13 18:03 |
| S70 | 453275 | 156/345.31.ccls. "156" | US-PGPUB; USPAT | OR | ON | 2006/04/13 18:16 |
| S71 | 1171 | ((156/345.31) or (156/345.32) or (118/718)).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/04/13 18:17 |
| S72 | 3 | S71 and "0"\$1ring | US-PGPUB; USPAT | OR | ON | 2006/04/13 18:17 |
| S73 | 115 | S71 and o\$1ring | US-PGPUB; USPAT | OR | ON | 2006/04/13 18:17 |
| S74 | 2577 | o\$1ring with (ball spher\$4) | US-PGPUB; USPAT | OR | ON | 2006/04/17 17:12 |
| S75 | 3865 | (o\$1ring gasket) with (ball spher\$4) | US-PGPUB; USPAT | OR | ON | 2006/04/17 17:12 |

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| S76 | 1 | S75 and 414/935-941.ccls. | US-PGPUB; USPAT | OR | ON | 2006/04/17 17:13 |
| S77 | 23 | S75 and "414"/\$.ccls. | US-PGPUB; USPAT | OR | ON | 2006/04/17 17:14 |
| S78 | 1050 | 277/910.ccls. | US-PGPUB; USPAT | OR | ON | 2006/11/16 13:05 |
| S79 | 3122 | ((277/910) or (277/644) or (277/626) or (277/637)).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/11/16 14:05 |
| S80 | 17 | ("3052478" "3214182" "3584889" "3799501" "4434909" "5002290" "5076557" "5088745" "5536018" "5551705" "5687976" "6065757" "6129358" "6264206" "6719302").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2006/11/16 17:30 |
| S81 | 0 | ("6981704").URPN. | USPAT | OR | ON | 2006/11/16 17:32 |
| S82 | 2001 | @pd>="19661213" and S79 | US-PGPUB; USPAT | OR | ON | 2006/11/16 17:44 |
| S83 | 1124 | @pd<="19661213" and S79 | US-PGPUB; USPAT | OR | ON | 2006/11/20 14:21 |
| S84 | 13 | ("3167322").URPN. | USPAT | OR | ON | 2006/11/16 18:08 |